

### R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

### CLAIM OBJECTIONS

The objection to claim 1 has been obviated by appropriate amendment and should be withdrawn.

### CLAIM REJECTIONS UNDER 35 U.S.C. §112

The rejection of claims 21 and 22 under 35 U.S.C. §112, first paragraph, is respectfully traversed and should be withdrawn. The phrase "(ii) a BTMP after luma state, (iii) an SPU/VBI state" (claim 21) and "(ii) a BTMP after chroma state, (iii) an SPU/VBI state" (claim 22) are clearly supported by the drawings as originally filed. Furthermore, one skilled in the art, reading the claims in light of the specification, would have understood the inventor to be in possession of the claimed invention at the time of filing. As such, the rejection should be withdrawn.

Specifically, the present invention relates to a method and/or architecture for implementing decoder video plane variable scaling generally and, more particularly, to a video horizontal and vertical variable scaling filter that may be used in a single chip MPEG-2 decoder (see Field of the Invention on page 1, lines 9-13 of the specification). The acronyms OSD (on screen display), SPU

(sub-picture unit) and VBI (vertical blanking interval) are well known terms to skilled artisans in the field of video and video compression/encoding (e.g., MPEG2). What is conventional or well known to one of ordinary skill in the art need not be disclosed in detail (See MPEP § 2163(II)(A)(3)). If the skilled artisan would have understood the inventor to be in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly described in the specification, then the adequate description requirement is met (MPEP § 2163(II)(A)(3)). One skilled in the field of the invention would recognize FIG. 27 as being a state diagram clearly illustrating a finite state machine comprising a BTMP after luma state, a BTMP after chroma state and a SPU/VBI state, as presently claimed. As such, claims 21 and 22 comply with 35 U.S.C. §112, first paragraph, and the rejection should be withdrawn.

Furthermore, the Office Action fails to provide any evidence or convincing line of reasoning why one of ordinary skill in the field of the invention, when reading the claims in light of the specification, would not recognize that the inventor had possession of the presently claimed invention (see page 3, paragraph no. 7 of the Office Action). Contrary to the position taken in the Office Action, one of ordinary skill in the art would recognize the state "BTMP after luma" and "BTMP after chroma" as relating to requests associated with on screen display (OSD) (see

page 30, lines 3-15 in the specification). Similarly, one skilled in the art would recognize the state SPU/VBI as relating to requests associated with (i) a sub-program unit (SPU) and/or (ii) a vertical blanking interval (VBI), e.g., closed caption or other "line 21" type data.

Because the specification and drawings as originally filed included a state diagram corresponding to the presently claimed finite state machine, the application would reasonably convey to one skilled in the art that the inventor was in possession of the claimed invention at the time of filing. Furthermore, since the Office Action does not present any evidence or convincing line of reasoning why one of ordinary skill in the field of the invention, when reading the claims in light of the specification, would not recognize that the inventor had possession of the presently claimed invention, the Office Action does not meet the Office's burden to factually establish a reasonable basis for challenging the adequacy of the written description (MPEP §2163.04). As such, claims 21 and 22 comply with 35 U.S.C. §112, first paragraph, and the rejection should be withdrawn.

#### **CLAIM REJECTIONS UNDER 35 U.S.C. §103**

The rejection of claims 1-4, 6-9 and 11-19 under 35 U.S.C. §103(a) as being unpatentable over Malinowski et al. (U.S. Patent No. 5,574,572; hereinafter Malinowski) in view of Shirota

(U.S. Patent No. 4,376,290) is respectfully traversed and should be withdrawn.

The rejection of claims 5 and 20 under 35 U.S.C. §103(a) as being unpatentable over Malinowski in view of Shirota, in further view of Iwase (U.S. Patent No. 5,089,893) is respectfully traversed and should be withdrawn.

The rejection of claim 10 under 35 U.S.C. §103(a) as being unpatentable over Malinowski in view of Shirota, in further view of Fandrianto et al. (U.S. Patent No. 5,982,459; hereinafter Fandrianto) is respectfully traversed and should be withdrawn.

The rejection of claims 21-23 under 35 U.S.C. §103(a) as being unpatentable over Malinowski in view of Shirota, in further view of Ozcelik et al. (U.S. Patent No. 6,078,616; hereinafter Ozcelik) is respectfully traversed and should be withdrawn.

Malinowski is directed to a view scaling method and device (Title of Malinowski). Shirota is directed to a color video information processing apparatus (Title of Shirota).

In contrast to Malinowski and Shirota, the presently claimed invention (claim 1) provides an address generator circuit configured to generate one or more first control signals, where the address generator comprises a finite state machine configured to allow multiple luma and multiple chroma picture requests to follow in sequence. Claims 15 and 16 include similar limitations. The cited references fail to teach or suggest each and every element of

the presently claimed invention. As such, the presently claimed invention is fully patentable over the cited references and the rejections should be withdrawn.

Specifically, the Office Action admits that (i) with respect to claim 1, Malinowski "does not teach the remaining limitation of an address generator circuit configured to generate said one or more first control signals" (see page 5, lines 13-14 of the Office Action) and (ii) with respect to claims 15 and 16, Malinowski "does not teach the claimed state that is configured to allow multiple luma and chroma picture requests to follow in sequence" (see page 11, lines 17-20 and page 13, line 10 of the Office Action). Shirota does not cure the deficiencies of Malinowski.

Specifically, contrary to the position taken in the Office Action on page 6, lines 1-9, element 70 in FIG. 13 of Shirota does not appear to teach or suggest an address generator circuit, as presently claimed. In particular, Shirota identifies the element 70 as being a multiplexer control circuit (see column 21, lines 1-17 of Shirota). The Office Action fails to present any evidence or convincing line of reasoning why one of ordinary skill in the field of the invention would consider a multiplexer control circuit as taught by Shirota to be the same as the presently claimed address generator circuit.

Furthermore, the Office Action fails to present any

evidence or convincing line of reasoning why one of ordinary skill in the field of the invention would consider the group of logic gates 78-89 in FIG. 13 of Shirota as being the same as the presently claimed finite state machine. Specifically, one skilled in the art would understand that a finite state machine is a device that can be uniquely defined by (i) a set of possible states,  $S$ , (ii) an output function that defines an output ( $Y$ ) based on an input ( $X$ ) and a current state ( $S_c$ ) and (iii) a transition function that defines a next state ( $S_n$ ) based on the input and the current state (see definition of "finite state machine," attached as Exhibit A). In contrast, the group of gates 78-89 in FIG. 13 of Shirota do not appear to provide a set of possible states. Rather, the gates 78-89 in FIG. 13 of Shirota merely appear to implement combinatorial logic. Therefore, Applicant's representative respectfully requests the Examiner provide a clear and concise explanation of why the group of gates 78-89 in FIG. 13 of Shirota would be considered by a skilled artisan to be the same as the presently claimed finite state machine or withdraw the rejection.

Furthermore, the position taken in the Office Action on page 6, lines 1-9, that (i) the signals  $(SL_n)_y$ ,  $(SL_{n-1})_y$  and  $(SL_{n+1})_y$  correspond to the presently claimed luma picture requests and (ii) the signals  $(SL_n)_c$ ,  $-(SL_n)_c$  correspond to the presently claimed chroma picture requests does not appear to be technically correct. Shirota identifies the signals as being luminance signal components

and chrominance components available from the filter (Y and C Separator) 54 (see column 19, line 47 through column 20, line 50 of Shirota). The Office Action fails to present any evidence or convincing line of reasoning why one of ordinary skill in the field of the invention would consider the luminance component signals and chrominance component signals of Shirota as being the same as luma and chroma picture requests, as presently claimed. Therefore, because the Office Action fails to meet the Office's burden of factually establishing a *prima facie* case of obviousness by showing one or more references that teach or suggest each and every element of the presently claimed invention, the presently claimed invention is fully patentable over the cited references (MPEP §2142) and the rejections should be withdrawn.

Furthermore, the Office Action fails to present any evidence or convincing line of reasoning why one of ordinary skill in the field of the invention would have selected the cited references for combination. Simply because references may be combined does not make their combination obvious unless the Office establishes a suggestion or motivation for such combination (MPEP § 2143). Furthermore, the Office Action fails to present any evidence or convincing line of reasoning with regard to whether one of ordinary skill in the field of the invention would consider there being a reasonable expectation of success with respect to the modification of Malinowski with Shirota. The Office Action further

fails to present any evidence or convincing line of reasoning why one of ordinary skill in the art would recognize the signals CT<sub>3</sub> to CT<sub>6</sub>, CT<sub>A</sub>, CT<sub>B</sub>, and CT<sub>1,2,7,8</sub> in FIG. 13 of Shirota as being the same as the presently claimed one or more first control signals. Therefore, the Office Action fails to meet the Office's burden to factually establish the *prima facie* case of obviousness (MPEP §2142). As such, the presently claimed invention is fully patentable over the cited references and the rejection should be withdrawn.

Claims 2-14 and 17-23 depend, directly or indirectly, from either claim 1 or claim 16 which are believed to be allowable. As such, the presently claimed invention is fully patentable over the cited references and the rejection should be withdrawn.

Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

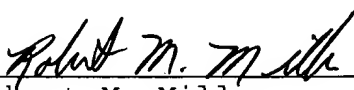
The Examiner is respectfully invited to call the Applicant's representative at 586-498-0670 should it be deemed beneficial to further advance prosecution of the application.



If any additional fees are due, please charge Deposit  
Account No. 12-2252.

Respectfully submitted,

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